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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,680	03/17/2004	Uri Adler	VRY-002	1867

7590 12/27/2005
Simon Kahn
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1700 Diagonal Road
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EXAMINER

ROYER, WILLIAM J

ART UNIT	PAPER NUMBER
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2852

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/801,680	Applicant(s) ADLER ET AL.	
	Examiner William J. Royer	Art Unit 2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plurality of photoconducting drums claimed in Claim 4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

In paragraph [0002], line 2, delete --- etc. ---.

In paragraph [0004], line 4, after "developer" insert --- unit ---.

In paragraph [0004], line 5, after "with" insert --- a ---.

In paragraph [0010], line 1, after "separation" insert --- of ---.

In paragraph [0011], line 1, after "separation" insert --- of ---.

In paragraph [0013], line 5, change "serial" to --- several ---.

In paragraph [0016], line 4, after "layer" insert --- 110 ---.

In paragraph [0016], line 6, after "drum" insert --- 100 ---.

In paragraph [0019], lines 1 and 4-6, after "elements" insert --- 135 ---.

In paragraph [0019], line 2, delete --- etc. ---.

In paragraph [0019], lines 2 and 6, after "developer" insert --- 130 ---.

In paragraph [0019], line 4, after "OPC" insert --- drum 100 ---.

In paragraph [0019], line 5, after "layer" insert --- 110 ---.

In paragraph [0019], line 7, after "drum" insert --- 100 ---.

In paragraph [0019], line 8, change "substrate may" to --- substrate 140 may ---.

In paragraph [0019], line 9, change "drum surface" to --- layer 110 ---.

In paragraph [0020], line 1, after "elements" insert --- 135 ---.

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In paragraph [0020], line 1, change "drum surface" to --- OPC layer ---.

In paragraph [0020], line 2, change "drum surface" to --- layer 110 ---.

In paragraph [0020], lines 5 and 7, change "drum" to --- OPC drum 100 ---.

In paragraph [0020], line 5, after "elements" insert --- 135 ---.

In paragraph [0020], line 7, before "corona" insert --- conditioning ---.

In paragraph [0020], line 7, change "the cleaning station" to --- a cleaning unit ---.

In paragraph [0020], line 8, change "a cleaning" to --- the cleaning ---.

In paragraph [0020], line 9, change "drum surface" to --- OPC layer 110 ---.

In paragraph [0021], line 2, delete --- etc., ---.

In paragraph [0024], line 1, after "layer" insert --- (OPC layer) ---.

In paragraph [0025], line 5, change "OPC drum" to --- drum 105 ---.

In paragraph [0026], line 2, change "drum surface" to --- OPC layer ---.

In paragraph [0026], lines 3 and 8, change "that OPC" to --- than that of ---.

In paragraph [0026], lines 6, 13 and 14, change "drum surface" to --- OPC layer
110 ---.

In paragraph [0026], line 7, change "OPC drum" to --- drum 105 ---.

In paragraph [0026], line 9, delete --- conductive ---.

In paragraph [0026], line 11, after "drum" insert --- 105 ---.

In paragraph [0026], line 14, after "developer" insert --- unit ---.

In paragraph [0027], line 2, delete --- , etc ---.

In paragraph [0027], line 3, change "insulating" to --- OPC ---.

In paragraph [0027], line 4, after "developer" insert --- unit 230 ---.

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In paragraph [0027], line 4, change “drum surface with” to --- OPC layer 110 with a ---.

In paragraph [0027], line 5, change “drum surface” to --- OPC layer ---.

In paragraph [0027], line 8, delete --- conductive ---.

In paragraph [0027], line 10, after “drum” insert --- 105 ---.

In paragraph [0027], line 11, change “250” to --- particles 250 ---.

In paragraph [0027], lines 12 and 15, change “drum surface” to --- OPC layer ---.

In paragraph [0027], line 13, change “245” to --- particles 245 ---.

In paragraph [0028], line 2, after “unit” insert --- 235 ---.

In paragraph [0028], line 6, change “drum surface” to --- OPC layer 110 ---.

In paragraph [0028], line 8, after “units” insert --- 235 ---.

In paragraph [0029], line 2, delete --- , etc., ---.

In paragraph [0029], line 2, change “toner elements” to --- particles ---.

In paragraph [0029], line 5, change “drum surface” to --- OPC layer ---.

In paragraph [0029], line 6, after “developer” insert --- unit ---.

In paragraph [0029], line 6, before “cleaning” insert --- first ---.

In paragraph [0029], line 7, delete --- conductive ---.

In paragraph [0030], line 2, change “OPC drum surface” to --- OPC layer 110 ---.

In paragraph [0030], lines 3 and 12, change each occurrence of “drum surface” to --- OPC layer 110 ---.

In paragraph [0030], lines 3 and 8, before “cleaning” insert --- first ---.

In paragraph [0030], line 5, after “device” insert --- . ---.

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In paragraph [0030], line 7, change "OPC drum 105. ." to --- drum 105. ---.

In paragraph [0030], lines 8 and 9, change "drum surface" to --- OPC layer ---.

In paragraph [0030], line 11, delete --- etc., ---.

In paragraph [0032], line 3, delete --- conductive ---.

In paragraph [0032], line 5, after each occurrence of "layer" insert --- 110 ---.

In paragraph [0032], line 5, change "charging corona" to --- corona charging device ---.

In paragraph [0033], line 1, change "200" to --- 105 ---.

In paragraph [0033], line 3, after "layer" insert --- 110 ---.

In paragraph [0033], line 4, after "developer" insert --- unit ---.

In paragraph [0033], line 4, change "drum surface" to --- OPC layer ---.

In paragraph [0033], line 5, change "drum surface" to --- OPC layer 110 ---.

In paragraph [0033], lines 7 and 8, change "drum surface" to -- OPC layer 110 --.

In paragraph [0034], line 1, change "200" to --- 105 ---.

In paragraph [0035], lines 8-10 and 13, after "elements" insert --- 320 ---.

In paragraph [0035], line 9, change "drum surface" to --- OPC layer 110 ---.

In paragraph [0035], line 10, delete --- OPC, ---.

In paragraph [0035], line 13, change "drum surface" to --- OPC layer 110 ---.

In paragraph [0036], lines 4 and 6, delete --- etc. ---.

In paragraph [0037], line 4, change "drum surface" to --- OPC layer 110 ---.

In paragraph [0037], line 5, change "drum surface 105" to --- OPC layer 110 ---.

In paragraph [0037], line 6, change "OPC drum" to --- drum 105 ---.

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In paragraph [0037], lines 9 and 10, change "drum surface" to --- OPC layer ---.

In paragraph [0038], line 2, change "OPC drum" to --- drum 105 ---.

In paragraph [0038], line 3, change "drum layer" to --- OPC layer 110 ---.

In paragraph [0039], line 1, change "device" to --- unit ---.

In paragraph [0039], lines 2 and 4, change "drum surface" to --- OPC layer ---.

In paragraph [0039], line 3, change "OPC drum" to --- drum 105 ---.

In paragraph [0039], line 3, change "drum surface" to --- OPC layer 110 ---.

In paragraph [0040], line 2, change "drum surface" to --- OPC layer ---.

In paragraph [0040], line 3, change "drum layer" to --- OPC layer 110 ---.

In paragraph [0041], line 11, delete --- etc. ---.

In paragraph [0043], line 3, delete --- , etc ---.

In paragraph [0045], line 2, after "unit" insert --- 255 ---.

In paragraph [0045], line 3, after "developer" insert --- unit ---.

In paragraph [0046], line 9, delete --- 45 ---.

In paragraph [0046], line 11, change "43" to --- 200 ---.

In paragraph [0047], line 5, after "developer" insert --- unit ---.

In paragraph [0047], line 17, delete --- etc ---.

In paragraph [0047], line 18, change "preventing" to --- prevent ---.

In the abstract, line 2, change "The" to --- A ---.

In the abstract, line 4, after "developer" insert --- unit ---.

In the abstract, line 5, after "with" insert --- a ---.

In the abstract, line 6, after "into" delete --- the ---.

Appropriate correction is required.

Claim Objections

Claims 1 and 4 are objected to because of the following informalities:

Claim 1, line 4, change "elements" to --- particles ---.

Claim 4, change "photconducting" to --- photoconducting ---.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite and inoperative as currently claimed because the apparatus is unable to perform color-based toner particle separation. The at least one charging source, developer unit and illumination unit fail to separate the toner particles. It appears that the at least one cleaning unit of Claim 2 actually performs the separation. Consequently, the at least one cleaning unit of Claim 2 should be incorporated into the apparatus of Claim 1 in order to enable the apparatus to perform separation of the toner particles.

Claim 5 is indefinite and incapable of performing the claimed method as currently claimed because the method is unable to separate particles of at least one color toner from a mixture of colored toner particles. The method of charging, depositing and illuminating fails to separate the toner particles. It appears that the cleaning off of Claim 6 actually performs the separation. Consequently, the cleaning off of Claim 6 should be incorporated into the method of Claim 5 in order to enable the method to separate particles of at least one color toner from a mixture of colored toner particles.

Allowable Subject Matter

Claims 1-10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Relevant Prior Art

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yano et al disclose a method and apparatus for collecting different color toners from an image carrier by using a plurality of cleaning members, redepositing the different color toners on particular surface portions of the image carrier followed by collecting the different color toners to particular developing devices.

Bares et al disclose a method and apparatus for mixed color toners separation and recovery.

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Fotland et al disclose a method and apparatus for eliminating stray background toner by first electrostatically neutralizing any background toner charge and then removing the neutralized toner.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Royer whose telephone number is (571) 272-2140. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William J. Royer
Primary Examiner
Art Unit 2852

wjr
December 23, 2005